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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,580	04/22/2004	Takao Ochi	10873.1430US01	6719

23552 7590 12/13/2005

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EXAMINER

DINH, TUAN T

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/829,580

Applicant(s)

OCHI ET AL.

Examiner

Tuan T. Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Haghiri-Tehrani et al. (U.S. Patent 5,834,755).

As to claims 1-2, Haghiri-Tehrani et al. discloses an electronic circuit device as shown in figures 1-5, comprising:

a board (1, column 2, lines 60-61) on which wirings (a metal layer having contact surface 5, column 2, lines 62-63) to the internal terminals (outer portion 23 of element 5A, see figure 5) are formed; an electronic component (9, column 3, line 2) that is mounted on the board and is connected with the internal terminals (23); and an encapsulation resin (15, column 3, line 5) with which the electronic component (9) and the internal terminals (23) are encapsulated, wherein a part of the wiring (5) formed as a multi-rings (5A, 5B) forms a ring-shaped portion, the ring-shaped portion having a plurality of gaps (rings being cutout, see figures 3-5) by which the ring-shaped portion is divided into a plurality of discontinuous ring-constituting sections (see figures 3-4), and wherein the plurality of ring-constituting sections are connected to the respective

internal terminals, and a coating region of the encapsulation resin (15) is surrounded with the ring-shaped portion.

As to claim 3, Haghiri-Tehrani et al. discloses in figure 5 that the internal terminals (23) are disposed within the ring-shaped portion, the wirings (5) extend from an outside of the ring-shaped portion (5B) to the respective internal terminals (23) so as to be connected thereto via the ring-shaped portion, and a connecting point of the wiring extending from the internal terminal with the ring-shaped portion and a connecting point of the wiring extending from the outside with the ring-shaped portion are disposed at positions different from each other.

As to claim 4, Haghiri-Tehrani et al. discloses an intersecting portion of the ring-shaped portion and one end of the wiring is shaped like a letter T, see figure 5.

As to claim 5, Haghiri-Tehrani et al. discloses in figures 3-5 the gaps provided in the respective wirings of the multi-ring as the ring-shaped portion are disposed so as not to be on a same normal line with respect to the ring-shaped portion.

As to claim 8, Haghiri-Tehrani et al. discloses a part of the wiring (5) as shown in figures 3-5 is formed so as to divide an inner region of the ring-shaped portion into a region including the internal terminals (23) and a region not including the internal terminals.

As to claim 9, Haghiri-Tehrani et al. discloses three or more wirings (5, see figures 3, 5) are formed, and at an intersecting portion of the wirings and the ring-shaped portion, two or less line segments are disposed linearly and in parallel from an outside to an inside of the ring-shaped portion.

As to claim 10, Haghiri-Tehrani et al. discloses the wiring (5), see figures 3-5 extending on the outside of the ring-shaped portion and the ring-shaped portion of the wiring intersect each other at angles of 60 degrees or more.

Allowable Subject Matter

3. Claims 6-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

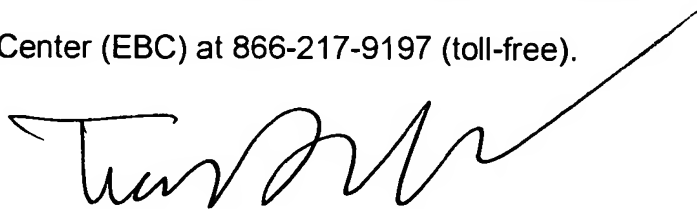
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Eberhardt et al. and Hirai et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2841

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tuan Dinh', with a long, sweeping horizontal line extending to the right.

Tuan Dinh
December 07, 2005.